

ABSTRACT

A distributed network, spread-spectrum system comprising a plurality of remote stations and a plurality of nodes. One or more hub node(s) connect(s) to a central telephone office. A node's spread-spectrum transceiver communicates, using packets having spread-spectrum modulation, over radio waves, with the plurality of remote stations. Each packet has a source address and a destination address, and may have other information such as a header, start of message, end of message, flow-control information, forward error correction, and message data. A store-and-forward subsystem stores and forwards one or more packets to and from the remote station. The store-and-forward subsystem stores and forwards the one or more packets to and from another node in the plurality of nodes. A flow-control subsystem controls the store-and-forward subsystem, to store each packet arriving at the spread-spectrum transceiver. The flow-control subsystem communicates traffic information between each of the nodes in the plurality of nodes. The flow-control subsystem routes the packet through appropriate nodes to the hub node from a remote station. Based on the traffic at each node, the flow-control subsystem transmits the packet from the hub node to an appropriate node, and routes the packet to a recipient remote station. The flow-control subsystem routes the plurality of packets through a path in the plurality of nodes to ensure that the plurality of packets arrive sequentially for voice or video packets.